

What is claimed is:

1. A direction indicating device comprising:

a direction specifying unit that detects geomagnetism to specify a direction of vehicle;

5 a display direction determining unit that determines a current display direction in consideration of historical information of the direction of vehicle specified by the direction specifying unit and a previous display direction; and

a direction providing unit that provides the current
10 display direction determined by the display direction determining unit.

2. The direction indicating device as claimed in claim 1, wherein the direction specifying unit repeatedly detects geomagnetism and finds a mean value of the geomagnetism during a sampling
15 period and specifies a directional section to which the mean value of the geomagnetism belongs as a direction of vehicle.

3. The direction indicating device as claimed in claim 1, wherein in a case where the current direction of vehicle specified by the direction specifying unit agrees with a previous direction
20 of the vehicle, the display direction determining unit makes the current display direction agree with the current direction of vehicle.

4. The direction indicating device as claimed in claim 2, wherein in a case where the current direction of vehicle specified by
25 the direction specifying unit agrees with the previous direction of vehicle, if the latest mean value of geomagnetism is within a margin region to prevent chattering at a boundary of the directional sections, the display direction determining unit makes the current display direction agree with the previous
30 display direction, and if the latest mean value of geomagnetism

is without the margin region, the display direction determining unit makes the current display direction agree with the current direction of vehicle.

5 5. The direction indicating device as claimed in claim 4, wherein
in a case where the current direction of vehicle specified by
the direction specifying unit, the previous direction of vehicle
and the second previous direction of vehicle agree with each
other, the display direction determining unit makes the margin
region to prevent chattering at the boundary of the respective
10 directional sections narrower.

6. The direction indicating device as claimed in claim 5, wherein
in a case where the current direction of vehicle specified by
the direction specifying unit is different from the previous
direction of vehicle, the display direction determining unit
15 returns the margin region to prevent chattering to an original
size.

7. The direction indicating device as claimed in claim 1, wherein
in a case where the current direction of vehicle specified by
the direction specifying unit is different from the previous
20 direction of vehicle, the display direction determining unit
makes the current display direction agree with the previous
display direction.

8. The direction indicating device as claimed in claim 7, wherein
even in a case where the current direction of vehicle is different
25 from the previous direction of vehicle, the display direction
determining unit determines a traveling direction of the
vehicle from the current direction of vehicle, the previous
direction of vehicle, and previous display direction and if the
traveling direction is constant, the display direction
30 determining unit updates the current display direction to the

traveling direction side of the vehicle by one directional section from the previous display direction.